

## **ABSTRACT**

The present invention provides a power supply apparatus including a system linkage inverter. The power supply apparatus has a simple facility structure and is capable  
5 of accurately supplying a dummy load with excessive electric power that changes from time to time. The power supply apparatus has a system linkage inverter (13) for inversely transforming DC electric power into AC electric power and supplying the AC electric power to a load (17) connected to a system power supply (20), a dummy load (21) connected parallel to the load (17) through a power device (22), a circuit (28) for  
10 detecting electric power flowing from the load to the system power in every constant time, a calculating unit (29) for accumulating the detected electric power, and a control unit (30) for turning on and off the power device for the dummy load based on a state value of an electric power flow calculated by the calculating unit.